

SSSSSSSSSSSS	DDDDDDDDDDDD	AAAAAAA
SSSSSSSSSSSS	DDDDDDDDDDDD	AAAAAAA
SSSSSSSSSSSS	DDDDDDDDDDDD	AAAAAAA
SSS	DDD	AAA
SSSSSSSSSS	DDD	AAA
SSSSSSSSSS	DDD	AAA
SSSSSSSSSS	DDD	AAA
SSS	DDD	AAA
SSSSSSSSSSSS	DDDDDDDDDDDD	AAA
SSSSSSSSSSSS	DDDDDDDDDDDD	AAA
SSSSSSSSSSSS	DDDDDDDDDDDD	AAA

FILEID**INDEX

M 3

IIIIII NN NN DDUDDDDD EEEEEEEEEE XX XX
IIIIII NN NN DDDDDDDD DD EE EEEEEEEEEE XX XX
NN NN DD DD DD EE EEEEEEEEEE XX XX
NN NN DD DD DD EE EEEEEEEEEE XX XX
NN NN DD DD DD EE EEEEEEEEEE XX XX
NN NN DD DD DD EE EEEEEEEEEE XX XX
NN NNNN DD DD DD EE EEEEEEEEEE XX XX
NN NNNN DD DD DD EE EEEEEEEEEE XX XX
NN NN DD DD DD EE EEEEEEEEEE XX XX
NN NN DD DD DD EE EEEEEEEEEE XX XX
NN NN DDDDDDDD EEEEEEEEEE XX XX
NN NN DDDDDDDD EEEEEEEEEE XX XX

LL IIIDDDDD SSSSSSSS
LL IIIDDDDD SSSSSSSS
LL IIIDDDDD SSSSSS
LLLLLLLLLL IIIDDDDD SSSSSSSS
LLLLLLLLLL IIIDDDDD SSSSSSSS

**F

(1)	2	COPYRIGHT NOTICE
(1)	29	PROGRAM DESCRIPTION
(2)	58	DECLARATIONS
(3)	69	STORAGE DEFINITIONS
(4)	95	READ-ONLY DATA DEFINITIONS
(5)	105	DUMMY_INDEX -- PRINT DUMMY TABLE OF CONTENTS
(6)	148	PRINT_INDEX -- PRINT TABLE OF CONTENTS PAGE
(7)	200	SET_HEADING -- SET A NEW PAGE HEADING

0000 1 .TITLE INDEX TABLE OF CONTENTS FOR LISTING
0000 2 .SBTTL COPYRIGHT NOTICE
0000 3 .IDENT 'V04-000'
0000 4 :
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 24 :*
0000 25 :*
0000 26 :*****
0000 27 :*****

0000	29	.SBTTL PROGRAM DESCRIPTION
0000	30	++
0000	31	FACILITY
0000	32	
0000	33	SYSTEM DUMP ANALYZER
0000	34	
0000	35	ABSTRACT
0000	36	
0000	37	LISTING TABLE OF CONTENTS
0000	38	
0000	39	ENVIRONMENT
0000	40	
0000	41	NATIVE MODE, USER MODE
0000	42	
0000	43	AUTHOR
0000	44	
0000	45	TIM HALVORSEN, JULY 1978
0000	46	
0000	47	MODIFIED BY
0000	48	
0000	49	V002 KEK0004 K. E. Kinnear 30-July-1981
0000	50	Change default addressing mode to longword.
0000	51	
0000	52	V001 MTR0001 Mike Rhodes 22-Jun-1981
J000	53	Remove references to \$SDAMSGDEF macro.
0000	54	
0000	55	--

0000 58 .SBTTL DECLARATIONS
0000 59 :
0000 60 : SYMBOL DEFINITIONS
0000 61 :
0000 62 \$FABDEF ; FILE ACCESS BLOCK (FAB)
0000 63 \$RABDEF ; RECORD ACCESS BLOCK (RAB)
0000 64
0000002D 0000 65 MAX HEADINGS = 45 ; MAX. 45 HEADINGS
00000036 0000 66 HEADING SIZE = 54 ; LENGTH OF EACH SLOT
0000 67 ; EACH ASCIC HEADING IS PRECEDED BY A LONGWORD PAGE NUMBER.

0000	69	.SBTTL	STORAGE DEFINITIONS
0000	70	:	
0000	71	:	STORAGE DEFINITIONS
0000	72	:	
0000	73		
00000000	74	.PSECT	SDADATA,NOEXE,WRT
0000	75		
0000	76	INDEX_RFA:	
00000006	77	.BLKW	3 ; RFA OF DUMMY INDEX
0006	78		
FFFFFFFFFF	79	CUR_HEADING::	
0006	80	.LONG	-1 ; CURRENT HEADING NUMBER
000A	81		
00000012	82	SUB_HEADING::	
000A	83	.BLKL	2 ; DESCRIPTOR OF CURRENT HEADING
0012	84		
00000016	85	HEADING_ROUTINE::	
0012	86	.BLKL	1 ; ADDRESS OF HEADING ROUTINE
0016	87		
0016	88	HEADINGS:	
FFFFFFFFFF	89	.LONG	-1 ; ADDRESS OF HEADINGS BUFFER
001A	90		
00000000	91	.PSECT	INDEX,EXE,NOWRT
0000	92		
0000	93		.DEFAULT DISPLACEMENT,LONG

0000 95 .SBTTL READ-ONLY DATA DEFINITIONS
0000 96
0000 97 :
0000 98 : READ-ONLY DATA DEFINITIONS
0000 99 :
0000 100
0000 101 INDEXCTL1:
0000 102 STRING <!38* !32AC!4UL>
00000050 001B 103 LINE_LENGTH = 1+79 ; MAXIMUM LENGTH OF EACH LINE

001B 105 .SBTTL DUMMY_INDEX -- PRINT DUMMY TABLE OF CONTENTS
 001B 106 ---
 001B 107
 001B 108 DUMMY_INDEX
 001B 109
 001B 110 THIS ROUTINE PRINTS A PAGE FULL OF EMPTY RECORDS
 001B 111 TO THE LISTING FILE TO BE LATER WRITTEN OVER WHEN
 001B 112 THE TABLE OF CONTENTS BECOMES AVAILABLE.
 001B 113
 001B 114 INPUTS:
 001B 115
 001B 116 NONE
 001B 117
 001B 118 OUTPUTS:
 001B 119
 001B 120 NONE
 001B 121
 001B 122 ---
 001B 123
 001B 124 DUMMY_INDEX::
 000C 001B 125 .WORD ^M<R2,R3>
 001D 126
 001D 127 CLRL PAGE NUMBER
 00000000'EF D4 0023 128 MNEGL #1,COR HEADING ; RESET : RESET PAGE NUMBER
 00000006'EF 01 CE 002A 129 CLRQ SUB HEADING ; RESET HEADING INDEX
 0000000A'EF 7C 0030 130 SKIP PAGE ; AND CLEAR ANY SUBHEADING
 0037 131 SKIP 3
 0040 132 PRINT 0,<!35* !15* Table of Contents>
 004D 133 PRINT 0,<!35* !15* ----->
 005A 134 SKIP 2
 53 00000000'EF DE 0063 135 MOVAL LIST,R3
 22 A3 0050 8F B0 006A 136 MOVW #LINE LENGTH,RABSW_RSZ(R3)
 00000000'EF 00 FB 0070 137 CALLS #0,PUT_LINE ; OUTPUT DUMMY RECORD
 50 00000000'EF 9E 0077 138 MOVAB INDEX_RFA,R0
 80 10 A3 D0 007E 139 MOVL RABSW_RFA(R3),(R0)+ ; SAVE CURRENT POSITION
 60 14 A3 B0 0082 140 MOVW RABSW_RFA+4(R3),(R0)
 52 2C D0 0086 141 MOVL #MAX_READINGS-1,R2 ; ITERATION COUNT
 22 A3 0050 8F B0 0089 142 10\$:
 00000000'EF 00 FB 008F 143 MOVW #LINE LENGTH,RABSW_RSZ(R3)
 F0 52 F5 0096 144 CALLS #0,PUT_LINE ; OUTPUT RECORD
 04 0099 145 SOBGT R2,10\$- ; LOOP UNTIL DONE
 RET

009A 148 .SBTTL PRINT_INDEX -- PRINT TABLE OF CONTENTS PAGE
 009A 149 ---
 009A 150
 009A 151
 009A 152
 009A 153 THIS ROUTINE OVERWRITES THE PREVIOUSLY OUTPUT DUMMY
 009A 154 RECORDS WITH THE TABLE OF CONTENTS LISTING AND ZERO
 009A 155 THE REMAINING RECORDS.
 009A 156
 009A 157
 009A 158 INPUTS:
 009A 159 HEADINGS HOLDS THE LIST OF SUB_HEADINGS AND PAGE NUMBERS
 009A 160
 009A 161 OUTPUTS:
 009A 162
 009A 163 NONE
 009A 164
 009A 165 ---
 009A 166
 009A 167 PRINT_INDEX::
 000C 009A 168 .WORD ^M<R2,R3>
 009C 169
 53 00000000'EF DE 009C 170 MOVAL LIST,R3
 50 00000000'EF 9E 00A3 171 MOVAB INDEX_RFA,R0
 10 A3 80 DD 00AA 172 MOVL (R0)+,RAB\$W_RFA(R3) ; RESET CURRENT POSITION
 14 A3 60 B0 00AE 173 MOVW (R0),RAB\$W_RFA+4(R3)
 1E A3 02 90 00B2 174 MOVB #RAB\$C_RFA,RAB\$B_RAC(R3) ; SHIFT TO RANDOM ACCESS
 0086 175 SFIND (R3) ; LOCATE FIRST DUMMY LINE
 1E A3 00 90 00D1 176 SIGNAL RMS,(R3)
 52 D4 00D5 177 MOVB #RAB\$C_SEC,RAB\$B_RAC(R3) ; BACK TO SEQUENTIAL ACCESS
 00000006'EF D5 00D7 178 CLRL R2 ; CURRENT SUB HEADING INDEX
 01 18 00DD 179 TSTL CUR_HEADING ; ANY HEADING?
 04 00DF 180 BGEQ 10\$; BRANCH IF SO
 00E0 181 RET
 10\$:
 00E0 182 10\$:
 00E0 183 SGET (R3)
 00E9 184 SIGNAL RMS,(R3)
 51 50 36 52 C5 00F8 185 MULL3 R2,#HEADING_SIZE,R0 ; OFFSET TO SLOT
 00000016'FF40 9E 00FF 186 MOVAB @HEADING\$[R0],R1 ; ADDRESS OF SLOT
 81 DD 0107 187 PUSHL (R1)+ ; PAGE NUMBER
 61 9F 0109 188 PUSHAB (R1) ; ADDRESS OF ASCII STRING
 00000000'EF 7F 010B 189 PUSHAQ LINE_DESCR ; BUFFER DESCRIPTOR
 00 DD 0111 190 PUSHL #0 ; RESULT STRING LENGTH
 FEE9 CF 9F 0113 191 PUSHAB INDEXCTL1 ; CONTROL STRING
 00000000'GF 05 FB 0117 192 CALLS #5 G^SYS\$FA0 ; FORMAT STRING
 011E 193 SUPDATE (R3)
 0127 194 SIGNAL RMS,(R3)
 00000006'EF 52 D6 0139 195 INCL R2 ; INCREMENT HEADING NUMBER
 52 D1 013B 196 CMPL R2,CUR_HEADING ; CHECK IF LAST HEADING
 9C 15 0142 197 BLEQ 10\$; CONTINUE UNTIL DONE
 04 0144 198 RET

0145 200 .SBTTL SET_HEADING -- SET A NEW PAGE HEADING
 0145 201 ---
 0145 202
 0145 203
 0145 204 SET_HEADING
 0145 205 THIS ROUTINE ACCEPTS THE DESCRIPTOR OF A STRING AND
 0145 206 SAVES THE SUB-HEADING IN THE HEADING ARRAY TO BE USED
 0145 207 FOR THE INDEX.
 0145 208
 0145 209 INPUTS:
 0145 210
 0145 211 4(AP) = ADDRESS OF STRING DESCRIPTOR OF HEADING
 0145 212
 0145 213 OUTPUTS:
 0145 214
 0145 215 NONE
 0145 216
 0145 217 ---
 0145 218
 0145 219 SET_HEADING::
 003C 0145 220 .WORD ^M<R2,R3,R4,R5>
 0147 221
 00000016'EF D5 0147 222 TSTL HEADINGS : SEE IF STORAGE ALLOCATED YET
 14 14 014D 223 BGTR \$S : BRANCH IF OK
 00000097E 8F DD 014F 224 PUSHL #MAX_HEADINGS*HEADING_SIZE : LENGTH OF HEADING BUFFER
 00000000'EF 01 FB 0155 225 CALLS #1,ALLOCATE : ALLOCATE STORAGE
 00000016'EF 51 D0 015C 226 MOVL R1,HEADINGS : SAVE ADDRESS OF BUFFER
 0147 227 5\$:
 S2 0000000A'EF 9E 0163 228 MOVAB SUB_HEADING,R2
 53 00000006'EF 9E 016A 229 MOVAB CUR_HEADING,R3
 00000012'EF D4 0171 230 CLRL HEADING ROUTINE : NO HEADING ROUTINE BY DEFAULT
 62 04 BC 7D 0177 231 MOVG @4(AP),TR2 : SET NEW HEADING
 2D 63 D1 0178 232 CMPL (R3),#MAX_HEADINGS : CHECK IF ENOUGH ROOM
 01 19 017E 233 BLSS 10\$: IF STILL ROOM TO STORE
 04 0180 234 RET
 0147 235 10\$:
 81 51 50 36 63 D6 0181 236 INCL (R3) : INCREMENT HEADING NUMBER
 01 00000016'FF40 C5 0183 237 MULL3 (R3),#HEADING_SIZE,R0 : OFFSET TO SLOT
 00000000'EF 9E 0187 238 MOVAB @HEADINGS[R0],R1 : ADDRESS OF SLOT
 81 62 90 0197 239 ADDL3 PAGE_NUMBER,#1,(R1)+ : STORE PAGE NUMBER
 61 04 B2 62 28 019A 240 MOVB (R2),(R1)+ : STORE LENGTH
 04 019F 241 MOVC3 (R2),@4(R2),(R1) : STORE STRING
 0147 242 RET

01A0 244
01A0 245 .END

21 2
21 2
20 2

21 2
20 2
20 2
41 2

21 2
21 2
20 4
2F 4

21 2
20 4
2F 4
20 2

65 7
63 6
6F 6

72 6
28 4
72 4

6E 6

INDEX

Symbol table

TABLE OF CONTENTS FOR LISTING

K 4

16-SEP-1984 01:31:11 VAX/VMS Macro V04-00
5-SEP-1984 03:32:42 [SDA.SRC]INDEX.MAR;1

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SS.TMP1	=	00000001		
SS.TMP2	=	00000063		
ALLOCATE	*****	*****	X	03
CJR HEADING		00000006	RG	02
DUMMY INDEX		00000018	RG	03
FABSL-STV	=	0000000C		
HEADINGS		00000016	R	02
HEADING_ROUTINE	=	00000012	RG	02
HEADING_SIZE	=	00000036		
INDEXCT[1		00000000	R	03
INDEX_RFA		00000000	R	02
LIB\$SIGNAL		*****	X	03
LINE_DESCR		*****	X	03
LINE_LENGTH	=	00000050		
LIST		*****	X	03
MAX_HEADINGS	=	0000002D		
NEW_PAGE		*****	X	03
PAGE_NUMBER		*****	X	03
PRINT		*****	X	03
PRINT INDEX		0000009A	RG	03
PUT LINE		*****	X	03
RAB\$B-RAC	=	0000001E		
RAB\$C-RFA	=	00000002		
RAB\$C-SEQ	=	00000000		
RAB\$W-RFA	=	00000010		
RAB\$W-RSZ	=	00000022		
SET HEADING		00000145	RG	03
SKIP_LINES		*****	X	03
SUB HEADING		0000000A	RG	02
SYSSFAO		*****	X	03
SYSSFIND		*****	GX	03
SYSSGET		*****	GX	03
SYSSUPDATE		*****	GX	03

! Psect synopsis !

PSECT name

Allocation PSET No. Attributes

• ABS
• SABSS
SDADATA
INDEX
LITERALS

00000000	(	0.)	00	(	0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
00000000	(	0.)	01	(	1.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE
0000001A	(	26.)	02	(	2.)	NOPIC	USR	CON	REL	LCL	NOSHR	NOEXE	RD	WRT	NOVEC	BYTE
000001A0	(	416.)	03	(	3.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	NOWRT	NOVEC	BYTE
00000046	(	70.)	04	(	4.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	NOWRT	NOVEC	BYTE

Performance indicators !

Phase

Page faults	CPU Time	Elapsed Time
29	00:00:00.04	00:00:00.54
110	00:00:00.41	00:00:02.64
188	00:00:02.60	00:00:09.27
0	00:00:00.22	00:00:02.10
57	00:00:00.61	00:00:02.71

INDEX
VAX-11 Macro Run Statistics

TABLE OF CONTENTS FOR LISTING

L 4

16-SEP-1984 01:31:11 VAX/VMS Macro V04-00
5-SEP-1984 03:32:42 [SDA.SRC]INDEX.MAR;1

Page 11
(9)

Symbol table output	5	00:00:00.03	00:00:00.04
Psect synopsis output	2	00:00:00.01	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	393	00:00:03.93	00:00:17.31

The working set limit was 1350 pages.

26609 bytes (41 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 326 non-local and 9 local symbols.
25 source lines were read in Pass 1, producing 18 object records in Pass 2.
18 pages of virtual memory were used to define 16 macros.

! Macro library statistics !

Macro library name	Macros defined
-S255\$DUA28:[SDA.OBJ]SDALIB.MLB;1	4
-S255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
-S255\$DUA28:[SYSLIB]STARLET.MLB;2	9
TOTALS (all libraries)	13

456 GETS were required to define 13 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LI\$S:INDEX/OBJ=OBJ\$S:INDEX MSRC\$S:INDEX/UPDATE=(ENH\$S:INDEX)+EXECMLS/LIB+LIB\$S:SDALIB/LIB

LOC!
V04-

0352 AH-BT13A-SE
VAX/VMS V4.0

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